

## CLAIMS

### WHAT IS CLAIMED IS:

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A method for determining route redistribution at a device within a network, the method comprising:

5 receiving an information packet from a neighbor source, the information packet identifying the source as a stub router and specifying route types that the source will advertise; and

upon receiving notice of a failed link within the network, sending query packets requesting route information only to neighboring devices that have not  
10 been identified as stub routers.

2. The method of claim 1 wherein receiving an information packet comprises receiving a hello packet containing peer information.

15 3. The method of claim 1 wherein the device and stub router are configured for EIGRP.



10. The method of claim 1 wherein the device and the neighboring devices have multipoint links.

11. The method of claim 10 wherein only one neighboring device is a stub router.

12. The method of claim 10 wherein multiple neighboring devices are stub routers.

13. The method of claim 1 wherein the device is a router.

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14. A method for reducing query generation for route redistribution within a network, the method comprising:

receiving information at a router identifying the router as a stub router;

5 sending an information packet from the stub router to neighboring devices, the information packet identifying the source as a stub router and specifying route types that the stub router will advertise; and

upon receiving a query for route information other than the type specified in the information packet, sending a response packet with routes identified as inaccessible.

10 15. The method of claim 14 wherein the network has a hub and spoke arrangement and the stub router is a spoke.

15 16. The method of claim 14 wherein the stub router is in communication with a dual homed device.

17. The method of claim 14 wherein sending an information packet comprises transmitting a hello packet.



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21. A computer system for determining route redistribution at a device within a network, the system comprising:

memory; and

a processor configured for receiving an information packet from a neighbor source, the information packet identifying the source as a stub router and specifying route types that the source will advertise, and sending query packets requesting route information only to neighboring devices that have not been identified as stub routers upon receiving notice of a failed connection.

22. A computer system for reducing query generation for route redistribution within a network, the system comprising:

means for identifying a device as a stub router;

means for sending an information packet from the stub router to neighboring devices, the information packet identifying the source as a stub router and specifying route types that the stub router will advertise; and

upon receiving a query for route information other than the type specified in the information packet, means for sending a response packet with routes identified as inaccessible.

28. A computer program product for reducing query generation for route redistribution within a network, comprising:

code that receives information at a router identifying the router as a stub router;

code that sends an information packet from the stub router to neighboring devices, the information packet identifying the source as a stub router and specifying route types that the stub router will advertise; and

code that sends a response packet with routes identified as inaccessible upon receiving a query for route information other than the type specified in the information packet; and

a computer-readable storage medium for storing the codes.





